

Abstract of the Disclosure

A tunable two-pole passive notch filter circuit for attenuating select frequencies of a multi-frequency CATV signal. The circuit includes an input for receiving a multi-frequency CATV signal, and an output for transmitting a portion of the multi-frequency CATV signal.

A filter network for attenuating a band of frequencies from the multi-frequency signal is

5 distributed between the input and the output. The filter network includes three parallel branches A, B, and C, each being arranged in series connection between the input and the output. Branches A and B are arranged in parallel. Branch A includes an inductor. Branch B includes an adjustable tank circuit, and may optionally include a stabilizing inductor

connected between the adjustable tank circuit and the output. Branch C includes a second

10 adjustable electrical resonator that is preferably shunted across branch C to ground.

Preferably, the first and second adjustable electrical resonators each include LC parallel-resonant circuits. The filter has frequency response characteristics that are more stable than prior art two-pole notch filters, and similar to the response characteristics of more complex notch filters having three poles or four poles. The two-pole tunable notch filter circuit

15 provides a passband response to 1 GHz.